

Abstract of the Disclosure

DIAGNOSTIC TEST FOR VARIABLE VALVE MECHANISM

Having the ability to quickly and easily test whether a variable valve mechanism is operating properly can avoid unnecessary down time and the expense associated with potentially replacing a good component on an internal combustion engine. A test can include inducing a misfire in a cylinder of the engine at least in part by commanding a change to a state of a variable valve mechanism at a predetermined timing. For instance, in the case of a diesel engine, a variable valve mechanism can be tested by closing an intake valve late so as to reduce a cylinder compression ratio to a point that autoignition of fuel does not occur, resulting in a misfire. If a misfire is detected, either audibly by a person or possibly electronically via a sensor, then proper activation of the variable valve mechanism is confirmed.